

CLAIMS

What is claimed is:

1. (Currently Amended) An apparatus for transferring torque magnetically comprising:
 - a primary torque driving rotary member and a secondary driven rotary member;
 - the primary rotary member axially overlapping said secondary rotary member;
 - the secondary rotary member being surrounded by said primary member;
 - the primary rotary member having permanent magnets mounted on it;
 - the secondary rotary member having electro-conductive elements and magnetically permeable materials, but not having permanent magnets or other permanent magnetic elements;
 - said secondary rotary member axially overlapped by said primary rotating member wherein a means for varying said primary rotary member's axial position relative to said secondary rotating member is provided; and
 - said primary rotating member being connected to and driven by a torque producing device and said secondary rotating member being connected to a torque utilizing device whereby rotation of the primary rotary member causes rotation of said secondary rotating member by some or all of the magnetic flux lines emanating from said permanent magnets mounted on said primary rotating member cutting through the electro-conductive material on said secondary rotary member thereby generating torque and rotation in said secondary rotary member in relation to the percentage of the total area that said secondary rotary member is axially overlapped by said primary rotary member.
2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Previously Presented) The apparatus according to claim 13 in which the secondary rotary member's electro-conductive material's circumferential ladder geometry is divided into a plurality of electrically independent segmented arcs, mounted on said seondary rotary member's outer cylindrical surface.

15. (Canceled)

16. (Currently Amended) An apparatus for transferring torque magnetically comprising:

a primary torque driving rotary member and a secondary driven rotary member;

the primary rotary member axially overlapping said secondary rotary member;

the secondary rotary member being surrounded by said primary member;

the primary rotary member having electro-conductive elements and magnetically permeable materials, but not having permanent magnets or other permanent magnetic elements;

the secondary rotary member having permanent magnets mounted on it;

said secondary rotary member axially overlapped by said primary rotating member wherein a means for varying said primary rotary member's axial position relative to said secondary rotating member can be varied; and

said primary rotating member being connected to and driven by a torque producing device and said secondary rotating member being connected to a torque utilizing device whereby rotation of the primary rotary member causes rotation of said secondary rotating member by some or all of the magnetic flux lines emanating from said permanent magnets mounted on said primary rotating member cutting through the electro-conductive material on said secondary rotary member thereby generating torque and rotation in said secondary rotary member in relation to the percentage of the total area that said secondary rotary member is axially overlapped by said primary rotary member.

17. (Canceled)

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Previously Presented) The apparatus according to claim 28 in which the primary rotary member's electro-conductive material's circumferential ladder geometry is divided into a plurality of electrically independent segmented arcs, mounted on said primary rotary member's inner cylindrical surface.

30. (Canceled)